Brian Schweitzer, Governor

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July 31, 2012

Ms. Bonnie Kostelecky Fisher Sand & Gravel Co. P.O. Box 1034 Dickinson, ND 58602-1034

Dear Ms. Kostelecky:

Montana Air Quality Permit #2848-02 is deemed final as of July 31, 2012, by the Department of Environmental Quality (Department). This permit is for a portable crushing/screening facility. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Charles Homer

Manager, Air Permitting, Compliance and Registration Environmental Engineer Air Resources Management Bureau

(406) 444-5279

Deanne Fischer, P.E.

Air Resources Management Bureau

(406) 444-3403

CH:DF Enclosure

Montana Department of Environmental Quality Permitting and Compliance Division

Montana Air Quality Permit #2848-02

Fisher Sand & Gravel Co. P.O. Box 1034 Dickinson, ND 58601

July 31, 2012



MONTANA AIR QUALITY PERMIT

Issued To: Fisher Sand & Gravel Co. P.O. Box 1034 Dickinson, ND 58601 MAQP: # 2848-02 Administrative Amendment (AA) Request Received: 06/20/2012

Department's Decision on AA: 07/13/2012

Permit Final: 07/31/2012

AFS #: 777-2848

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Fisher Sand & Gravel Co. (Fisher), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

Fisher owns and operates a portable crushing/screening facility at various locations throughout Montana. MAQP #2848-02 applies while operating at any location in Montana, except those areas having a Montana Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas. A list of the permitted equipment is located in Section I.A of the permit analysis.

B. Current Permit Action

On June 20, 2012, the Department received a request from Fisher to amend MAQP#2848-01 to remove mention of a 635 kilowatt (kW) generator from the permit analysis. Fisher has all their generators permitted individually and does not require inclusion of the generator in this permit for the portable crushing/screening facility. The removal of the generator is being made as an amendment to the permit in accordance with ARM 17.8.764. The current permit action removes mention of the 635 kW generator from MAQP#2848-01 and also updates the permit to reflect current permit language and rule references used by the Department.

Section II: Conditions and Limitations

A. Emission Limitations

- All visible emissions from any Standards of Performance for New Stationary Source (NSPS) – affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 Code of Federal Regulations (CFR) Part 60, Subpart OOO):
 - a. For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity
 - b. For crushers that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 15% opacity

- 2. All visible emissions from any other NSPS-affected equipment (such as screens and conveyors) shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
 - a. For equipment that commence construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
 - b. For equipment that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 10% opacity.
- 3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 4. Fisher shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- 5. Fisher shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.749 and ARM17.8.752).
- 6. Water and spray bars shall be available on-site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749 and ARM 17.8.752).
- 7. Fisher shall not operate more than one crusher at any given time and the maximum rated design capacity of the crusher shall not exceed 300 tons per hour (TPH) (ARM 17.8.749).).
- 8. If the permitted equipment is used in conjunction with any other equipment owned or operated by Fisher, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- 9. Fisher shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

- Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS-affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2. Additional testing may be required by 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If this portable crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
- 2. Fisher shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Fisher as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM17.8.749).
- 3. Fisher shall supply the Department with annual production information for all emission points, as required by the Department, in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.
 - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, and/or to verify compliance with permit limitations (ARM 17.8.505).).
- 4. Fisher shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include the addition of a new emissions unit, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

Section III: General Conditions

- A. Inspection Fisher shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emissions monitoring system(CEMS) or continuous emissions rate monitoring system CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Fisher fails to appeal as indicated below.

- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Fisher of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Air Quality Operation Fees Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Fisher may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Fisher shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis Fisher Sand and Gravel Co. MAQP #2848-02

I. Introduction/Process Description

A. Permitted Equipment

Fisher Sand and Gravel Co. (Fisher) owns and operates a portable crushing and screening plant which includes a portable 1992 Kue Ken jaw crusher (maximum rate: 300 tons per hour), screen, conveyor, and associated equipment.

B. Source Description

Fisher uses this crushing plant and associated equipment to crush and sort sand and gravel materials that will be used in various construction industries.

For a typical operational setup, materials are excavated from a pit with a front-end loader and re-loaded into a trap that feeds the jaw crusher. Rejects from this crushing process are transported by a conveyor to a stockpile and the rest of the material is conveyed to a screening plant. Oversized material from the screening plant is transported via conveyor to a secondary crusher and specifically sized material is conveyed to three stockpiles. Finally, a loader fills a truck that delivers the materials to various construction industries.

This unit is based in North Dakota and does not have a designated home location in Montana.

C. Permit History

On January 19, 1995, Fisher submitted a complete permit application to operate a 1990 Kue Ken jaw crusher. This facility operated in various locations throughout the State of Montana.

In 1999, the U.S. Environmental Protection Agency (EPA) informed the Department of Environmental Quality (Department) that any condition in an air quality preconstruction permit would be considered a federally enforceable condition. However, there are certain state rules that were never intended to be federally enforceable. The Department notified all the facilities holding preconstruction permits that they could request deletion of those conditions based on ARM 17.8.717 (currently ARM 17.8.756) and ARM 17.8.315. Removing either condition did not relieve the facility from complying with the rule upon which the permit condition was based; removal only ensured that the enforcement of the condition remains solely with the Department. The permit action removed the condition, based on ARM 17.8.717 (currently ARM 17.8.756), from Fisher's permit. In addition the permit was updated to include the proper rule citation and potentially applicable conditions. **MAQP #2848-01** replaced MAQP #2848-00.

D. Current Permit Action

On June 20, 2012 the Department received a request from Fisher to amend MAQP#2848-01 to remove mention of a 635 kilowatt (kW) generator from the permit analysis. Fisher has all their generators permitted individually and do not require inclusion of the generator in the permit for the crusher operation. The removal of the generator is being made as an administrative amendment in accordance with ARM 17.8.764. The current permit action

removes mention of the 635 kW generator from MAQP#2848-02 and also updates the permit to reflect current permit language, emissions inventory, and rule references used by the Department. **MAQP** #2848-02 replaces MAQP #2848-01.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations where appropriate.

A. ARM 17.8, Subchapter 1, General Provisions, including, but not limited to:

- 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter
- 2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
- 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Fisher shall comply with the requirements contained in the Montana Source Test Protocol and Procedures manual including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

- 4. <u>ARM 17.8.110 Malfunctions.</u> (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than four hours.
- 5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.204 Ambient Air Monitoring
 - 2. ARM 17.8.220 Ambient Air Quality Standards for Settled Particulate Matter
 - 3. ARM 17.8.221 Ambient Air Quality Standard for Visibility, and,
 - 4. ARM 17.8.223 Ambient Air Quality Standards for PM-10.

Fisher must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3, Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Fisher shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. <u>ARM 17.8.310 Particulate Matter, Industrial Processes</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
 - 4. <u>ARM 17.8.322 Sulfur Oxide Emissions Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
 - 5. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Fisher is considered an NSPS-affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Fisher, the portable crushing equipment to be used under MAQP #2848-02 is subject to this subpart because it meets the definition of an affected facility and was constructed or modified after August 31, 1983.
 - 6. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. This facility is not a NESHAP-affected source because it does not meet the definition of any NESHAPs Subpart defined in 40 CFR Part 63.

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
 - 2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit, issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Fisher has a PTE greater than 15 tons per year of PM therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.
 - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

- 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Fisher of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

- F. ARM 17.8, Subchapter 8, Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications -- Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow. This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).
- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.
 - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2848-02 for Fisher, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to a current NSPS (40 CFR 60, Subpart A and Subpart OOO).
 - e. This facility is not subject to any current NESHAP standards.
 - f. This source is not a Title IV affected source
 - g. This source is not a solid waste combustion unit.
 - h. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Fisher will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Fisher will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. Fisher shall install on the new of modified source the maximum air pollution control capability which is technologically practicable and economically feasible, except that BACT shall be utilized.

A BACT determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. Emission Inventory

	tons/year						
Emission Source	PM	PM10	PM2.5	NOx	CO	VOC	SO2
Crusher: (300 ton/hr)	1.58	0.71	0.13				
Screen: (300 ton/hr)	2.89	0.97	0.07				
Material Transfer (controlled)	1.10	0.36	0.10				
Pile Forming	8.90	4.21	0.64				
Bulk Loading	0.66	0.66	0.66				
Haul Roads	11.37	3.13	0.31				
Total Emissions	26.50	10.05	1.91	0.00	0.00	0.00	0.00

Footnote: Inventory reflects maximum allowable emissions for all pollutants based on maximum production and year-round operation (8,760 hours). The facility did not take limits on production or hours of operation

HAPs = hazardous air pollutants

hp = horsepower

lb = pound

N/A = not applicable

ND = no data available

 $NO_X = oxides of nitrogen$

PM = particulate matter

 $PM_{10} = particulate$ matter with an aerodynamic diameter of 10 microns or less

 $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less

 SO_X = oxides of sulfur

TPH = tons per hour

TPY = tons per year

VOC = volatile organic compounds

yr = year

1992 Kue Ken Jaw Crusher

Maximum Process Rate; 300 tons per hour

Number of Crushers: 1 Crusher

Number of Hours of Operation: 8760 hours/yr (hr/yr)

(AP 42, Table 11.19.2-2, 8/04, controlled)

PM Emissions:

Emission Factor

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) = 1.58 ton/yrDaily Calculation: (300 ton/hr) * (0.0012 lb/ton) * (24 hr/day) = 8.64 lb/day

PM₁₀ Emissions:

Emission Factor

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) = 0.71 ton/yrDaily Calculation: (300 ton/hr) * (0.00054 lb/ton) * (24 hr/day) = 3.89 lb/day

PM_{2.5} Emissions:

Emission Factor

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.0001 lb/ton) * (ton/2000 lb) = 0.13 ton/yrDaily Calculation: (300 ton/hr) * (0.0001 lb/ton) * (24 hr/day) = 0.72 lb/day

^{**} CO = carbon monoxide

Screening

Maximum Production Rate: 300 tons per hr Number of Screens: 1 Screen

Numbers of Hours of Operation 8,760 hours per year

(AP 42, Table 11.19.2-2, 8/04)

Total PM Emissions:

Emission Factor

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.0022 lb/ton) * (ton/2000 lb) = 2.89 ton/yrDaily Calculation: (300 ton/hr) * (0.0022 lb/ton) * 24 hrs/day = 15.84 lb/day

Total PM₁₀ Emissions:

Emission Factor

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.00074 lb/ton) * (ton/2000 lb) = 0.97 ton/yrDaily Calculation: (300 ton/hr) * (0.00074 lb/ton) * 24 hrs/day = 5.33 lb/day

Total PM_{2.5} Emissions:

Emission Factor

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.00005 lb/ton) * (ton/2000 lb) = 0.07 ton/yrDaily Calculation: (300 ton/hr) * (0.00005 lb/ton) * 24 hrs/day = 0.36 lb/day

Material Transfer

Maximum Production Rate: 300 tons per hour

Number of Transfers: 6 transfers

Hours of Operation: 8760 hours per year

(AP 42, Table 11.19.2-2, 8/04)

Total PM Emissions:

Emission Factor

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.00014 lb/ton) * (ton/2000 lb) * (6 transfer) = 1.10 ton/yrDaily Calculation: (300 ton/hr) * (0.00014 lb/ton) * (6 transfer) * 24 hr/day = 6.05 lb/day

Total PM₁₀ Emissions:

Emission Factor

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.000046 lb/ton) * (ton/2000 lb) * (6 transfer) = 0.36 ton/yrDaily Calculation: (300 ton/hr) * (0.000046 lb/ton) * (6 transfer) * 24 hr/day = 1.99 lb/day

Total PM_{2.5} Emissions:

Emission Factor

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.000013 lb/ton) * (ton/2000 lb) * (6 transfer) = 0.10 ton/yrDaily Calculation: (300 ton/hr) * (0.000013 lb/ton) * (6 transfer) * 24 hr/day = 0.56 lb/day

Pile Forming

Process Rate: 300 ton/yr Number of Piles: 4 piles

Hours of Operation: 8760 hours per year

(AP 42, Sec. 13.2.4.3, 11/06)

PM Emissions:

Emission Factor = $k (0.0032) * (U/5)^1.3 * (M/2)^-1.4 = 0.00169 lb/ton$

Where: k = particle size multiplier

U = mean wind speed

M = material moisture content

Control Efficiency

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.00169 lb/ton) * (ton/2000 lb) * (4 piles) = 8.90 ton/yrDaily Calculation: (300 ton/hr) * (0.00169 lb/ton) * (4 piles) * 24 hr/day = 48.77 lb/day

PM₁₀ Emissions:

Emission Factor = $k (0.0032) * (U/5)^1.3 * (M/2)^-1.4 = 0.00080$ lb/ton

Where: k = particle size multiplier

U = mean wind speed

M = material moisture content

Control Efficiency

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.00080 lb/ton) * (ton/2000 lb) * (4 piles) = 4.21 ton/yrDaily Calculation: (300 ton/hr) * (0.00080 lb/ton) * (4 piles) * 24 hr/day = 23.07 lb/day

PM_{2.5} Emissions:

Emission Factor = $k (0.0032) * (U/5)^1.3 * (M/2)^1.4 = 0.00012$ lb/ton

Where: k = particle size multiplier

U = mean wind speed

M = material moisture content

Control Efficiency

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.00012 lb/ton) * (ton/2000 lb) * (4 piles) = 0.64 ton/yrDaily Calculation: (300 ton/hr) * (0.00012 lb/ton) * (4 piles) * 24 hr/day = 3.49 lb/day

Bulk Loading

Process Rate: 300 tons per hour

Number of loads: 5 loads

Hours of Operation: 8760 hours per year

(AP 42, Sec. 11.19.2-2, 8/2004)

PM Emissions:

Emission Factor

Control Efficiency

 $\begin{array}{ll} \mbox{Calculation: } (300 \ ton/hr) * (8760 \ hrs/yr) * (0.00010 \ lb/ton) * (ton/2000 \ lb) * (5 \ load) = 0.66 \ ton/yr \\ \mbox{Daily Calculation: } (300 \ ton/hr) * (0.00010 \ lb/ton) * (5 \ load) * 24 \ hr/day & = 3.60 \ lb/day \\ \end{array}$

PM_{10} Emissions:

Emission Factor

Control Efficiency

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.00010 lb/ton) * (ton/2000 lb) * (5 load) = 0.66 ton/yrDaily Calculation: (300 ton/hr) * (0.00010 lb/ton) * (5 load) * 24 hr/day = 3.60 lb/day

PM_{2.5} Emissions:

Emission Factor = $k (0.0032) * (U/5)^1.3 * (M/2)^-1.4 = 0.00010$ lb/ton

Control Efficiency

Calculation: (300 ton/hr) * (8760 hrs/yr) * (0.00010 lb/ton) * (ton/2000 lb) * (5 load) = 0.66 ton/yrDaily Calculation: (300 ton/hr) * (0.00010 lb/ton) * (5 load) * 24 hr/day = 3.60 lb/day

Haul Roads

Vehicle Miles traveled: (AP 42, Ch. 13.2.2, 11/06)

5 Vehicle Miles Traveled per day (estimated)

PM Emissions:

Emission Factor = $k * (s / 12)^a * (W / 3)^b =$ Where: $k = constant (Value for PM30/TSP)$ $s = surface silt content (Mean value, sand/gravel processing, material storage area)$ $W = mean vehicle weight (1994 average loaded/unloaded or a 40 ton truck)$ $a = constant (Value for PM30/TSP)$ $b = constant (Value for PM30/TSP)$	12.46 4.9 7.1 54 0.7 0.45	lb/VMT lbs/VMT % tons
Control Efficiency	0	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) =		tons/yr
Daily Calculation: $(5.00 \text{ VMT/day}) * (12.46 \text{ lb/VMT}) =$	62.30	lbs/day
PM ₁₀ Emissions:		
Emission Factor = $k * (s / 12)^a * (W / 3)^b = 3.43 \text{ lb/VMT}$	3.43	lb/VMT
Where: $k = constant (Value for PM30/TSP)$	1.5	lbs/VMT
s = surface silt content (Mean value, sand/gravel processing, material storage area)	7.1	%
W = mean vehicle weight (1994 average loaded/unloaded or a 40 ton truck) a = constant (Value for PM10/TSP)	54 0.9	tons
b = constant (Value for PM10/TSP)	0.45	
Control Efficiency	0	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) =		tons/yr
Calculation: $(8760 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (3.43 \text{ lb/VMT}) * (ton/2000 \text{ lb}) * (1-0/100) =$		tons/yr
Daily Calculation: (5.00 VMT/day) * (3.43 lb/VMT) =	3.13 17.17	lbs/day
PM _{2.5} Emissions:		
Emission Factor = $k * (s / 12)^a * (W / 3)^b = 0.34 lb/VMT$	0.34	lb/VMT
Where: $k = constant (Value for PM2.5/TSP)$	0.15	lbs/VMT
s = surface silt content (Mean value, sand/gravel processing, material storage area) W = mean vehicle weight (1994 average loaded/unloaded or a 40 ton truck)	7.1 54	% tons
a = constant (Value for PM2.5/TSP)	0.9	tons
b = constant (Value for PM2.5/TSP)	0.45	
Control Efficiency	0	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (0.34 lb/VMT) * (ton/2000 lb) =	0.31	tons/yr
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (0.34 lb/VMT) * (ton/2000 lb) * (1-0/100) =	0.31	tons/yr
Daily Calculation: (5.00 VMT/day) * (0.34 lb/VMT) =	1.72	lbs/day
	-	

V. Existing Air Quality

This permit is issued for the operation of a portable crushing and screening plant to operate at various locations throughout Montana, those areas for which this facility is permitted to operate, that have been designated unclassified/attainment with all ambient air quality standards, and there are no major air pollution sources in the surrounding area.

VI. Air Quality Impacts

The Department determined that there will be no impacts from this permitting action because this permitting action is considered an administrative action. Therefore, the Department believes this action will not cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #2848-02, the Department determined that there will be no impacts from this permitting action. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

IX. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an environmental assessment is not required.

Permit Analysis Prepared By: Deanne Fischer

Date: July 3, 2012